

A NEW MICRODISPODIDES (ACARI: PYGMEPHORIDAE) ASSOCIATED WITH A WESTERN BARK BEETLE

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ABSTRACT—*Microdispodides triplehorni*, new species, is described and illustrated. A key to species is included.

INTRODUCTION

According to Savulkina (1981), members of *Microdispodides* are found on beetles and rarely in moist forest litter. Of the two species known to date, one is associated with bark and ambrosia beetles (Scolytidae); the other with a weevil (Curculionidae). Moser (1981) found four females of a third species associated with the western bark beetle *Pseudohylesinus nebulosus* (LeConte), family Tenebrionidae. Two females were found under the elytra of *P. nebulosus*, one female was attached between the bases of coxa I and coxa II of *Corticeus subopacus* (Wallis), a tenebrionid associate of *P. nebulosus* (Moser 1981, Fig. 2), and one female was found in the gallery of *P. nebulosus* in Douglas fir *Pseudotsuga menziesii* (Mirbell).

The genus *Microdispodides* was erected by Vitzthum (1914) with *M. wichmanni* as the type for the genus. Krczal (1959) mistakenly placed *Pediculoides amaniensis* Oudemans (1912) as the type for *Microdispodides* when he described and placed his *M. karafiat* in this genus. Cross (1965) designated *P. amaniensis* as a synonym of *M. wichmanni*. This genus as defined by Cross (1965) would place Krczal's *M. karafiat* in the genus *Pygmephorus* Kramer (1877). Savulkina's (1981) key places *M. karafiat* in *Pygmephorus* Cross and Moser (1971). Morphologically and ecologically this species probably should be placed in this genus because members of *Pygmephorus* are found on small mammals or in their nests, whereas *Pygmephorus* spp. are found on beetles. We make no effort to place *M. karafiat* until its type can be studied. The classification of Mahunka (1970) is used in this paper. The dorsal and ventral setal signatures used here are those of Rack (1975).

All measurements are given in micron.

Microdispodides triplehorni, new species (Figs. 1-2)

DIAGNOSIS—This species is distinguished by setae 1a, 1b, 2a, 2b, and 3c being capitate or knoblike and in having the dorsum with strigulate hysterosomal engravings.

FEMALE—Body 240 long, 146 wide.

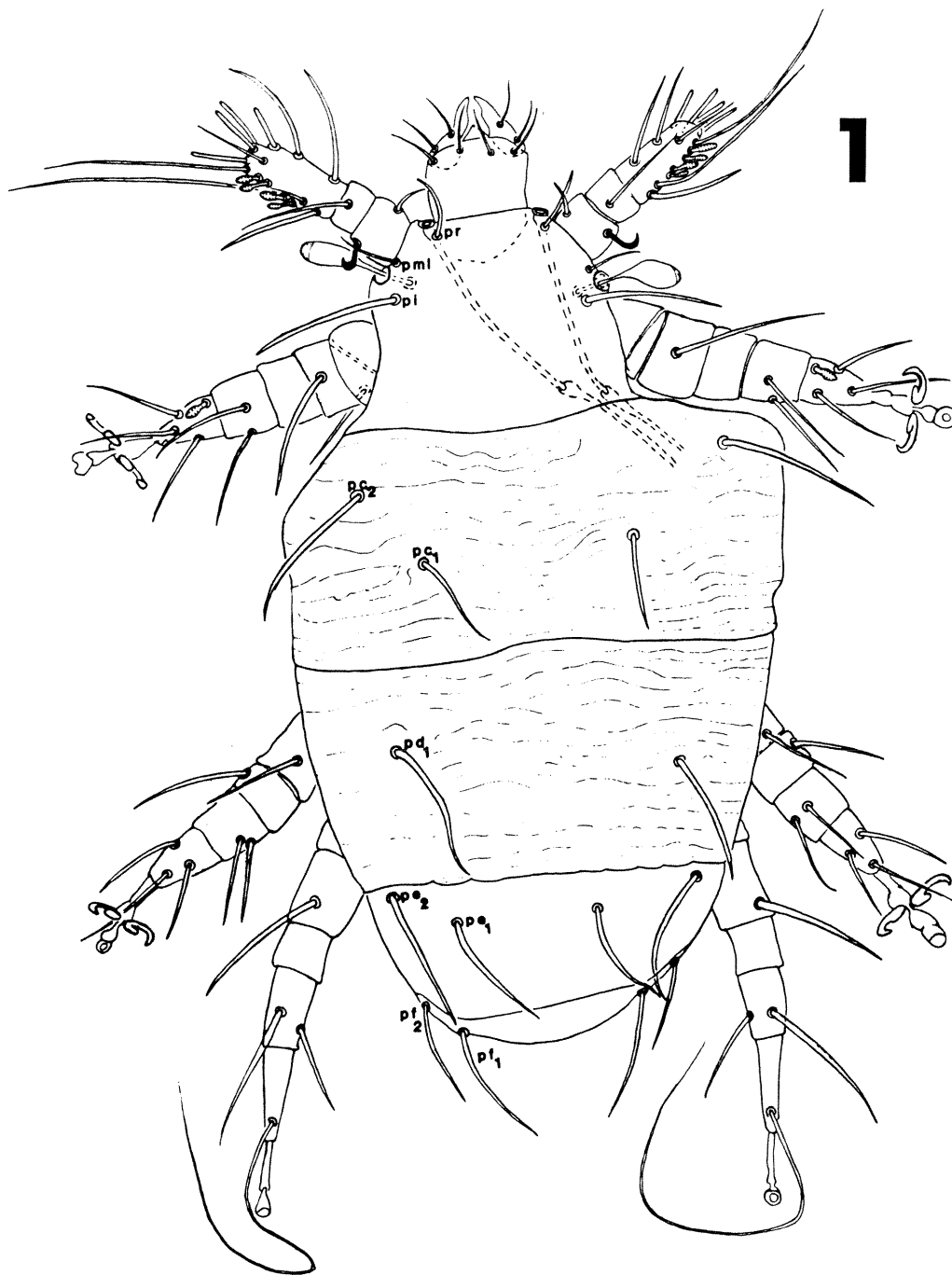
DORSUM (Fig. 1)—Propodosomal setae Pr and pml short and smooth; pi stout, smooth, more than twice as long as pr and pml. Setae pr and pml about as long as distance between bases. Setae pc₂ stout, thick, and longer than pc₁; pc₂ extending beyond base of pc₁. Setae pc₁ smooth, shorter and more slender than other setae. Setae pd₁, pe₂, pe₁, and pf₁ smooth, thick, and longer than other dorsal setae; pf₂ smooth, slender, and shorter than pe₂, pe₁, and pf₁. Hysterosoma with strigulate engravings as figured.

VENTER (Fig. 2)—Setae 1a, 1b, 2a, and 3c short and capitate as figured. Setae 1c, 2c, 3a, 3b, 4a, 4b, and 4c long and slender, and smooth. Setae ph₁₋₃ smooth and slender, about evenly separated from each other.

LEGS—I and IV without claws. I shorter than II-IV. II and III about equal in length. IV longer than I-III. Setae on all legs smooth.

MALE—Unknown.

TYPES—Holotype female U.S. National Museum of Natural History No. 4047, Pineville, Louisiana, (1 April 1976, collected from *Corticeus subopacus* (Wallis)) by John C. Moser. Paratypes. One female Fort Bragg, California, 6 July 1976, collected from gallery of *Pseudohylesinus nebulosus* (LeConte) in Douglas fir, by G. Ferrell. Two females Otis, Oregon) 1 March 1978, collected beneath the



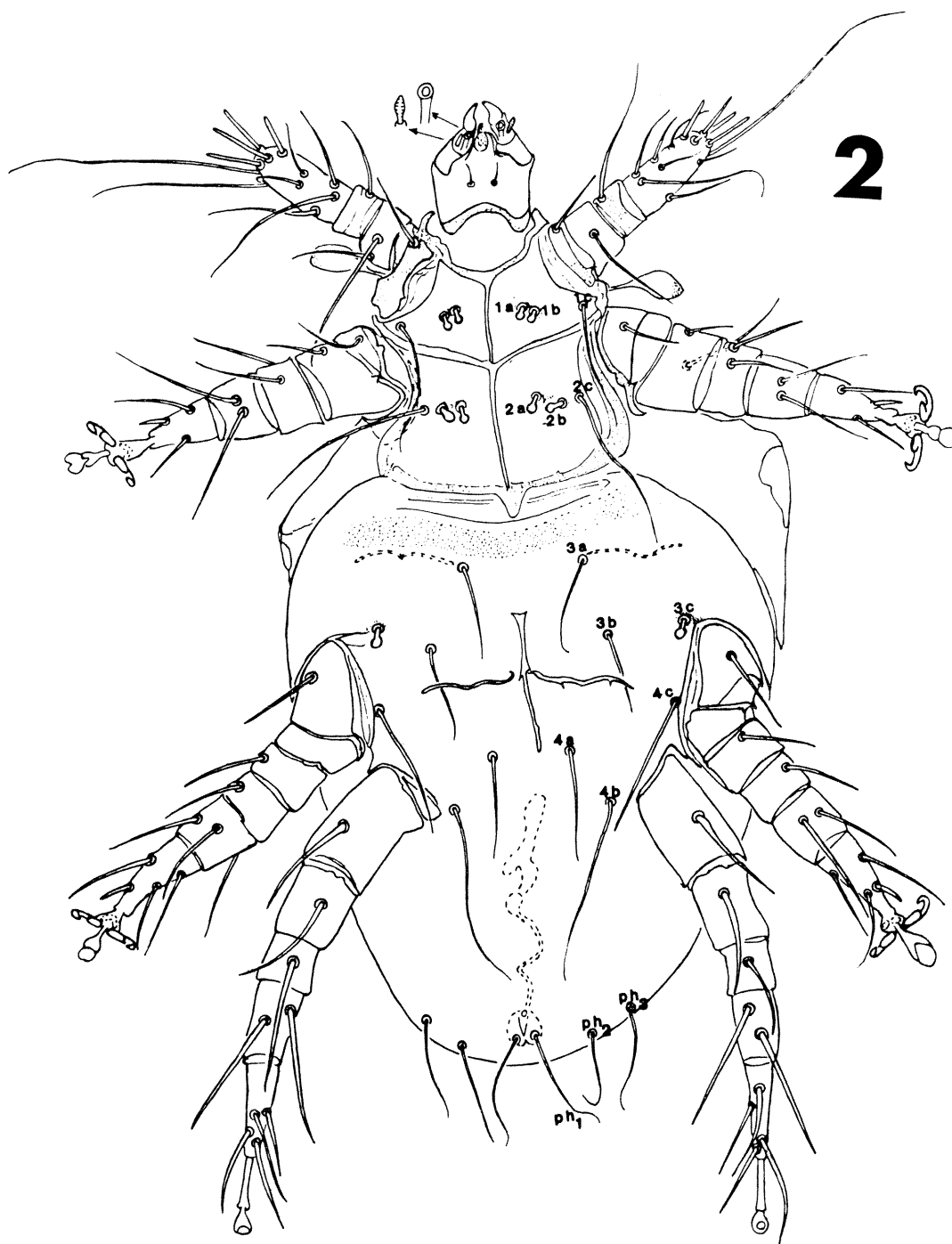
Figs. 1-2. *Microdispodides triplehorni*, n. sp. 1, dorsum, 2 venter.

elytra of *P. nebulosus* light trapped by Lee Ryker.

ETYMOLOGY—The species is named for Charles A. Triplehorn, Department of Entomology, The Ohio State University, Columbus, for his outstanding contributions on the systematics of the Tenebrionidae.

Key to Species

1. Ventral idiosoma with two or more spiniform or capitate setae, on Curculionidae and Tenebrionidae2
- Ventral idiosoma without apparent spiniform or



capitate setae, on Scolytoidea *Polygraphus congonus* Wichmann, Scolytidae and *Platypus hintzi* Schaufuss (= *P. dispar* Schaufuss), Platypodidae; Africa (Benin & Tanzania). **wichmanni* Vitzthum

2. Hysterosomal terga with bands of scalelike or variolate integumental engravings, ventral idiosomal setae 1a and 3c spiniform, on Curculionidae, *Meta-*

masius sp.; Central America (Guatemala)
 *pholidotus* Cross

- Hysterosomal terga with bands of strigulate integumental engravings, ventral idiosomal setae 1a, 1b, 2a, 2b, and 3c capitate, on Tenebrionidae, *Corticeus subopacus* (Wallis) and *Pseudohylensis nebulosus* (LeConte); North America (USA, Louisiana, Oregon, & California . . . *triplehorni*, n. sp.

*Based on Vitzthum 1914 and Cross 1965.

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